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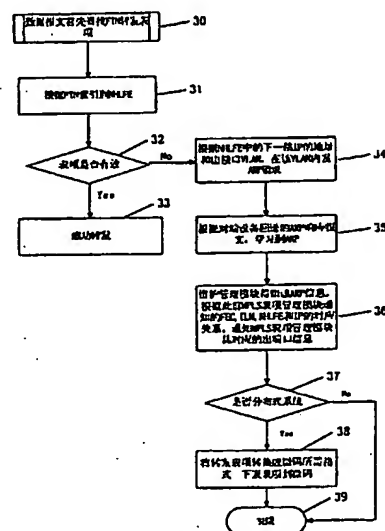
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(54) Title: METHOD OF MULTI-PORT VIRTUAL LOCAL AREA NETWORK (VLAN) SUPPORTED BY MULTI-PROTOCOL LABEL SWITCH (MPLS)

(54) 发明名称: 多协议标签交换 (MPLS) 支持多端口虚拟局域网 (VLAN) 的方法



- 30 FIRST DATA MESSAGE FINDING OUT AN ENTRY IN FORWARD TABLE ITEM
- 31 TO MPLS ACCORDING TO FIN INDEX
- 32 TABLE ITEM IS VALID OR NOT
- 33 FORWARD SUCCESSFULLY
- 34 SENDING ARP REQUEST IN THE VLAN, ACCORDING TO THE NEXT HOP IP ADDRESS OF MPLS AND OUT-INTERFACE VLAN
- 35 STUDY TO ARP, ACCORDING TO ARP RESPONSE MESSAGE RETURNED BY TO-END-DEVICE
- 36 MAINTAIN MANAGEMENT MODULE KNOWING THE ARP INFORMATION, INFORMING MPLS TABLE ITEM MANAGEMENT MODULE ABOUT ITS CORRESPONDING OUT-PORT INFORMATION ACCORDING TO THE FOREGOING CORRESPONDING RELATION OF FEC, LSP AND IP INFORMED BY MPLS TABLE ITEM MANAGEMENT MODULE
- 37 IS DISTRIBUTED SYSTEM OR NOT
- 38 TRANSFORM THE FORWARD TABLE ITEM TO FORMAT NEEDED BY MICRO-NODE, SEND TABLE DOWN TO MICRO-NODE ITEM
- 39 COMPLETED

(57) Abstract: The invention provides a method of multi-port Virtual Local Area Network (VLAN) supported by Multi-Protocol Label Switch (MPLS). This method includes steps: establishing Label Switch Protocol (LSP) through Label Distribute Protocol (LDP), getting Forward Equivalence Class (FEC) and label binding or the information of in-label and out-label binding, and address of LDP peer opposite to end, which is the next hop IP address; establishing forward relation table by MPLS table item managing module, and adding forward relation table item according to the achieved information; getting the output port corresponding to the said forward relation table item; completing MPLS by the said port. Using this invention, we can enable MPLS function support multi-port VLAN on the three layers switcher and perform MPLS in VLAN.

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WO 2005/011197 A1